In the Specification

Please amend the last paragraph of page 7 the ends as the first paragraph on page 8 as follows:

The distribution groove 36 sits at exactly the elevation of outlets 22 when the system is in operation and pressure of incoming fluid has pushed impeller 30 up to the top of body 12 (There is a small amount of longitudinal tolerance between impeller 30 and body 12). Distribution groove 36 is fed by the exit ends of the three spiral grooves as they move material up from inlet ~~24~~18. The fluid pathway between inlet ~~24~~18 and outlets 22 here is therefore split into three separate sub-pathways or spiral grooves that can be called supply grooves. The supply grooves provide three sources to the distribution groove 36, at 120° intervals. This allows for more even filling of distribution groove 36, than a single source would and attempts to provide constant material quality (defined at a ratio of the material in the two masses; quality = 1 would be all liquid, 0.0001 would be all gas), mass, and pressure to all outlets 22. Even if impeller 30 were to stop rotating, it provides three outlets to distribution ring or groove 36 and then to outlets 22.

Please amend, page 9, last paragraph, ending on page 10, as follows:

By referring to Figure 5, once bearing assembly 40 is secured to end plate 60 and impeller 30 is in conical cavity 26, end plate 60 (with bearing assembly 40, including ball 50) is inserted, as described, such that ball 50 is positioned in bore 33 of impeller 30 and end plate 60 is secured to manifold body 12. As can be appreciated, the small tolerance between the head of screw 52 and ball 50 is designed so that when pressurized NH_3 enters bore 24, it travels up bore 24 and impacts the nose of impeller 30, and enters the spiral groove of impeller 30. This creates an up-force on impeller 30 (in operational position it is vertically disposed, nose down in body 12) as the pressurized fluid hits the rifling or flighting (or walls of spiral groove 34) of impeller 30 which are at an angle relative to the flow path of fluid from inlet ~~24~~18. This essentially lifts impeller from being seated in conical cavity 26 and moves impeller up longitudinally until the concave head of screw 52 in impeller 30 comes into abutment with ball 50. As indicated above, there is about 1/8 inch play. When screw 52 is in abutment with ball 50, the ball partially seats in the concave in the head of screw 52 and this is essentially the only point of contact between impeller 30 and any other structure. Thus, this interface is the rotation bearing for impeller 30. The force of the fluid acting on the walls of spiral groove 34 of impeller 30 causes impeller 30 to

rotate on screw 52 around ball 50. Telfon ® ball 50 presents a relatively low coefficient of friction to metal screw head 52.

Please amend page 10, 4th full paragraph as follows:

A tachometer 83, connected by wire 84 to a read-out or other device, can be positioned in opening 78 on end plate 60 and used to monitor the speed of the impeller ~~22~~30 (see Figure 5).